A CASE REPORT OF A RARE PRESENTATION OF METAPLASTIC SQUAMOUS CELL CARCINOMA OF THE BREAST IN A YOUNG FEMALE

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INTRODUCTION

Primary squamous cell carcinoma (SCC) of the breast is a metaplastic carcinoma (MpBC) subtype, a very rare and aggressive type of breast cancer, which accounts for 0.1% of all invasive breast carcinomas. It is more common in the elderly post-menopausal age group. Most cases of primary breast SCC are triple-negative breast cancer - negative for oestrogen receptor (ER), progesterone receptor (PR), and human epidermal growth factor receptor 2 (HER2).

This case report outlines a rare clinicopathological profile of a metaplastic breast carcinoma - squamous cell carcinoma subtype in a young nulliparous woman with IHC profile; ER positive presenting with haemorrhagic breast cyst.

CASE REPORT

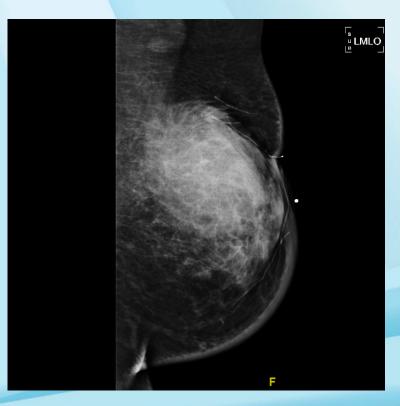
A 28-year-old woman presented with a left breast mass, gradually increasing in size over the past 2 months. The initial ultrasound findings revealed a large left breast complex cystic lesion. The cystic fluid was evacuated with no residual collection by fine needle aspiration, the fluid was bloody and sent for cytology and showed a few atypical cells with inflamed background. She was planned for excision biopsy of the lesion which was delayed for a period of 10 month due to her newly diagnosed epilepsy. Her CT Brain was normal.

During this period she came monthly and subsequently 2-weekly as the rate of re-accumulation becomes more rapid. Each time, about 200-500cc of haemorrhagic fluid was aspirated. Further cytology examinations did not reveal any atypia cell. In addition to this, a core biopsy of the residual mass post aspiration was performed and this was also negative.

She finally underwent wide local excision of the cystic mass at 11th month from presentation which confirmed Metaplastic Breast Carcinoma (MpBC), Squamous Cell Carcinoma (SCC) subtype, a rare malignancy with immunohistochemical profile as follows: ER positive, PR & HER2 negative. She subsequently underwent mastectomy as the margin were < 1mm with axillary clearance and immediate breast reconstruction using transverse rectus abdominis musculocutaneous flap (TRAM). 2 out of 15 lymph nodes shows reactive hyperplasia. This procedure was complicated with post operative wound breakdown due to large haematoma formation that required her to be admitted for blood transfusion and requiring revision of the flap. This complication keep reoccurring delaying the wound healing, further investigation to investigate this bleeding occurrence post operative revealed she has acquired platelet dysfunction associated with her malignancy. Her coagulation profile, platelet & eosinophile count, platelet aggregation test were all normal. We also ruled out haemophilia and von Willebrand disease. Her subsequent flap revision required platelet apheresis transfusion intra-operatively and her wound finally healed without post operative bleeding complication.

To exclude the primary site/metastasis and stage the tumour, computed tomography (CT) scanning of the head, neck, chest, and the abdomen was done, none of which revealed any suspicious lesions. Her disease was staged as pT3N0M0. She underwent 6 cycles of FEC-T chemotherapy and 15 fraction of radiotherapy to the chest wall.

She remains well till date, and is tumour free past 2 years. She is currently on selective oestrogen receptor modulator (SERM) with surveillance ultrasound breast follow up.



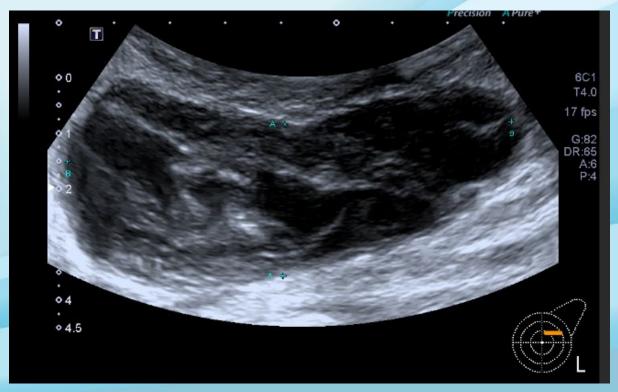


Fig 1& 2: Ultrasound & mammogram showing a large lobulated anechoic /hypoechoic cystic lesion with few septations & peripheral echogenic foci

Fig 1 Fig 2

CONCLUSION

Recurrent hemorrhagic cysts should always be considered a possible malignant lesion although core biopsy findings are benign. Sonography and cytological exam are the first steps in case of suspicious cysts, but false-negative results are common. In such cases, resection of the cyst should be considered early.

In our case the delay in proceeding with resection was due to her developing epilepsy episode however soon after she was immediately scheduled for a resection. This was then complicated with recurrent wound breakdown due to hematoma formation that was attributed to acquired platelet dysfunction which is possibly due to her underlying malignancy. Such occurrence is rare and there is no cases reported during our literature review.

In conclusion, breast SCC is an aggressive tumour with heterogeneous clinicopathological features associated with rapid progression, frequent relapses, and high mortality. Early diagnosis and treatment constitute the cornerstone in the prognosis of this rare disease.